THOMPSON RIVERS UNIVERSITY

Course Outline

Computing Science Department
Faculty of Science

COMP 2680 - 1
Web Site Design and Development

Instructor: Mohd Abdullah	**Phone/Voice Mail:** (250) 371-5961
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Course Description

This course introduces students to an overview of website development. The course focus on client-side components comprising of Hyper Text Markup Language (HTML), Cascading Style Sheets (CSS), Multimedia, JavaScript programming, Document Object Model (DOM) for dynamic web applications.

Educational Objectives/Outcomes

By the end of the course student should be able to:

- Comprehend fundamentals web design concepts and its related challenges.
- Design, develop, implement and maintain.
  - Typical static web pages with current web-related technologies.
  - Dynamic web pages with current web-related technologies.
- Design and develop a web project.

Prerequisites

COMP 1130 Computer Programming I
(This course is the prerequisite for COMP 3540 Advanced Web Design and Programming.)

Required Text

HTML5 and CSS3, and JavaScript 6th Edition Comprehensive New Perspectives: ISBN-13: 978-1-305-50392-2.

Recommended Resources

- www.w3schools.com
- www.stackoverflow.com

Student Evaluation

*Attendance & Participation	5%
Seminar/Lab Assignments	10%
5 Quizzes (@ 3% each)	15%
3 Tests (@ 15% each)	45%
Web Project	25%

* Minimum 90% attendance required to receive the 5%

To pass this course, a student must achieve a:

- Minimum 50% on the combined quizzes,
- Minimum 50% on the combined semester tests, and
- Minimum 60% on the web project (15 out 25)
- Submitted at least 4 out of 5 deliverable assignments on time

Grading

The TRU policy for grades can be found at http://www.tru.ca/__shared/assets/Grading_Systems5647.pdf.

Assignments:

- A late assignment counts as a missed assignment and is generally not accepted, resulting in a zero mark, unless a medical note from a doctor is provided. If a due date needs to be extended it will be done for the whole class and not for individuals.

Quizzes and Tests

- It is the department's and university's policy **NOT** to allow students to write quiz/tests/exams outside of the posted schedule time, except for bona fide compassionate or medical (A doctor's note is required) reasons.

- All quizzes/tests/exams MUST be written at the date and time scheduled. Each missed quiz/test/exam will receive a **0 mark** unless a medical note from a doctor is provided. If a medical note is provided the percent for the missed quiz/test/exam will be set identical to the percent for the final quiz/test/exam.

Attendance

- There are three (50-minute) lecture and one (50-minite) seminar/lab, scheduled each week. Students are expected to attend EVERY lecture AND seminar. If a lecture is missed, it is the student's responsibility to obtain missed notes from another student.

- An instructor may take roll-call or require signing an attendance sheet at the start of class. **Being more than five minutes late for the start of class will be considered as being absent.** An instructor may use attendance and participation data as part of determining the final grade in a course.
- The TRU policy can be found at http://www.tru.ca/__shared/assets/Student_Attendance5641.pdf. Students are required to attend at least 90% of scheduled classes or can be automatically withdrawn from the course. Instructors will remove a student's access to the course in Blackboard Learn, or Moodle if there are three unexcused absences in a row.
- Students who repeatedly miss lectures or labs will be required to withdraw from the course.

Lab Conduct/Behavior

1. During labs the student is expected to act in a professional manner towards other fellow students and instructors. Students not conducting themselves in such a manner may be asked to leave.

2. Students are to conduct themselves in a professional manner. Courtesy towards classmates and instructors is required at all times. Rude or disruptive behavior will **not** be tolerated.

3. Harassment is a serious offense and any violation under the B.C. Human Rights Act will be dealt with severely. The TRU policy can be found at http://www.tru.ca/__shared/assets/respectful_workplace_harrasment_prevention_poilcy28967.pdf

4. When discussing assignments, marks, etc. with your instructor, nagging, badgering, etc. are not acceptable behaviors.

5. Internet browsing is strictly NOT allowed during the lecture time or lab time unless it is a part of the lecture and the instructor has told you to do so.

6. Use of e-mail program is strictly NOT allowed during the class and lab times.

7. There should be strictly no typing during the presentation of the lesson unless you have been asked to do so by the instructor.

8. If you are found not complying with any of the above stated the instructor has complete right to switch off your computer and/or to leave the room.

9. Lab assignments will **ONLY** be marked and given credit if the student has indicated completion of the related lab exercises and is in attendance for the entire lab class.

10. During lab/seminar times, the student is expected to work on course work only.

Ethical Standards

The following behaviors are considered unethical:

1. Telling the instructor that you "need" a certain grade.
2. Asking for extra assignments for the purpose of raising a grade.
3. Asking that the grade be raised because it is very close to the next higher grade.
4. Asking that the grade be raised because you did very well on one part of the course or grading scheme.
5. Asking for a higher grade because you don't like the grading scheme.
6. Asking to be allowed to turn in an assignment late – even a few minutes late – because of computer or printer problems or any other reasons.
7. Asking to be treated better than other students by making an exception to the rules.
8. Asking for any other unfair advantage in grading.

Doing your Own Work

Group discussions of course material and studying together for tests are encouraged. However, assignments and examinations must reflect the knowledge of the individual, not a group. If there is a case where two assignments appears to be the exact copy of each other, both students will get zero marks.

Be aware that you are responsible for your listings and files left on computers, store files on your own disks and take home any listings of your programs to avoid any problems with someone duplicating your work without your knowledge.

Changes to this Outline

Although changes are not expected as of now, the terms of this course outline could be subject to changes during the instruction period, in which case, students will be notified.

Syllabus – Lecture Topics

- Identify, interpret structure and page content elements of an HTML5 document
- Develop a basic web site with HTML5 elements
- Style web site content (HTML5) with CSS3
- Create page layouts with CSS3
- Design for the mobile web
- Interpret structure and styles of web tables
- Identify various parts of web form elements
- Enhance a web site with multimedia
- Develop interactive web pages with JavaScript
    - JavaScript variables
    - JavaScript functions
    - Operators and expressions
    - Date objects and methods
    - Arrays, Loops and Conditional Statements
    - Browser and document object models
    - Events and event handlers
    - Validate client side web pages with JavaScript validation
    - Other miscellaneous topics on JavaScript (Time Permitting)

Syllabus/Lab Topics

- Lab 1: Business Web Project Assignment Discussion.
- Lab 2: Creating a Website for a Food vendor.
- Lab 3: Designing a Website for a Fitness Club.
- Lab 4: Creating a Website for a Chocolatier.

- Lab 5: Creating a Graphic Design for a Genealogy Website.
- Lab 6: Creating a Mobile Website for a Daycare Center.
- Lab 7: Creating a Program Schedule for a Radio Station.
- Lab 8: Working with Sound, Video, and Animation.
- Lab 9: Creating a Countdown Clock.
- Lab 10: Creating a Monthly Calendar.
- Lab 11: Develop an interactive web page using JavaScript event and event handlers for client side validation
- On-going project: Develop a fully functional web project by the end of the semester for a small business using concepts taught during lectures and applied in the various labs.

Use of Technology

- Blackboard LMS will be used extensively for posting most of the course material
- Windows, Notepad++, HTML5, CSS3 & Java Script

ACM / IEEE Knowledge Area Coverage

Knowledge Areas that contain topics and learning outcomes covered in the course

Knowledge Area (elective)	**Total Hours of Coverage**
HCI-Human Computer Interaction	Total 1
HCI/Programming Interactive Systems	1
PBD-Platform-Based Development	Total 12
PBD/Web Platforms	12

Body of Knowledge coverage

KA	**Knowledge Unit**	**Topics Covered**	**Hours**
HCI	Programming Interactive Systems (elective)	Software architecture patterns – Model-View Controller	1
PBD	Web Platforms (elective)	Web programming languages	12
		Web platform constraints	
		Software as a Service	
		Web standards	

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